REMARKS

In accordance with the foregoing, various of the pending claims have been amended to clarify the invention recited therein and, further, to improve form.

In the amended claim 17, a power distributing circuit is connected between each of the plurality of driving devices and driving power supply source.

Amended claim 33 includes the features of previous claims 33 and 34, claim 34 now canceled, and the amended claim 35 includes the features of previous claims 35 and 36, claim 36 now canceled.

New claim 63 includes the features of previous claims 17, 29 and 30, and new claim 64 includes the features of previous claims 17, 29 and 31.

New claim 65 includes the features of previous claims 1 and 2, new claim 66 includes the features of previous claims 1 and 4, and new claim 67 includes the features of previous claims 1 and 8.

New claim 68 includes the features of previous claims 9 and 10, new claim 69 includes the features of previous claims 9 and 12, and new claim 70 includes the features of previous claims 9 and 16.

New claim 71 specifies that the power distributing circuit is connected between each of the plurality of driving devices and the driving power supply source.

New claims 72 to 86, depending on new claim 71, substantially correspond to claims 18 to 32, depending on claim 17.

Each of new claims 87, 90, 93, and 96 includes the features of previous claims 39 and 40, each of new claims 88, 91, 94, and 97 corresponds to previous claim 41, and each of new claims 89, 92, 95, and 98 corresponds to previous claim 42. Further, new claims 87 to 89 depend on amended claim 1, new claims 90 to 92 depend on amended claim 9, new claims 93 to 95 depend on amended claim 17, and new claims 96 to 98 depend on new claim 71.

No new matter is presented.

Accordingly, approval and entry of the foregoing claim amendments and new claims are respectfully requested.

I. **CLAIMS 1, 4-9, 12-18, 21-25, 28, 29, 32, 33, 35 AND 38-40 ARE REJECTED UNDER 35 USC 102(e) AS BEING ANTICIPATED BY KATAYAMA ET AL. (USP 6,556,177)(PAGES 2-7 OF THE ACTION); AND**

II. **CLAIMS 2, 3, 10, 11, 19, 20, 36 AND 37 ARE REJECTED UNDER 35 USC 102(e) AS ANTICIPATED BY OR, IN THE ALTERNATIVE, UNDER 35 USC 103(a) AS OBVIOUS OVER KAYATAMA (USP 6,556,177)(PAGES 10-12 OF THE ACTION)**

Claims 1, 9, 17 and 71

In claim 1, a power distributing circuit is connected between a driving power supply source and a driving device without providing another power distributing circuit between a reference potential point and the driving device.

In claim 9, a power distributing circuit is connected between a reference potential point and a driving device without providing another power distributing circuit between a driving power supply source and the driving device.

In claim 17, a power distributing circuit is connected between each of a plurality of driving devices and a driving power supply source without providing another power distributing circuit between each of the plurality of driving devices and a reference potential point.

In claim 71, a power distributing circuit is connected between each of a plurality of driving devices and a reference potential point without providing another power distributing circuit between each of the plurality of driving devices and a driving power supply source.

Therefore, in each of claims 1, 9, 17 and 71, the power distributing circuit is provided at one of the positions, or points, between the driving power supply source and the driving device and between the reference potential point and the driving device, and the power distributing circuit is not provided at the other of the positions, or points, between the driving power supply source and the driving device and between the reference potential point and the driving device.

Katayama et al. discloses a driver circuit for capacitive display elements, wherein two power distributing circuits (voltage dividing loads) 10, 11; 12, 13 are provided at both plus and minus terminals of a power source 9, as shown in Figs. 1 and 3 and related descriptions thereof, so that the temperature rise of a driver IC 5 including an output circuit (push-pull circuit) 6 constituted by a P channel LDMOS 7 and an N-channel LDMOS 8, can be suppressed, and the operation of the driving IC 5 can be stabilized. It is noted that, in Katayama et al., if a pair of power distributing circuits are not provided at both plus and minus terminals of the power

source 9, it is understood that a temperature increase of the P-channel LDMOS 7 and the N-channel LDMOS 8 is not balanced and the operation of the driver IC 5 is not stabilized. Specifically, in Katayama et al., two power distributing circuits should be provided at both plus and minus terminals of the power source. Therefore, Katayama et al. does not teach or suggest the above special features of claims 1, 9, 17, and 71.

Claims 35, 65, and 68

In the referenced claims, the driving device consumes power from the power distributing circuit in accordance with the impedance of the resistive element (power distributing circuit) and, therefore, the impedance of the resistive element is designed to be as large as possible, within a specific range. However, a driving voltage is distorted in accordance with an increase in the impedance of the resistive element (resistive impedance), as the driving voltage is changed by a response speed which is proportional to a product of the resistive impedance and the capacitive load (load capacitor). In the present invention (as defined in the subject claims 35, 65, and 68), the power distributing circuit is a resistive element having an impedance whose value is not smaller than one-tenth of the value of a resistive component of a conducting impedance of a driving device. $R > \frac{1}{10} R$

In contrast to the above claims, in Katayama et al. and for example, as shown in Figs. 10A and 10B (scanning voltage waveforms)--a wave distortion is not considered, and the temperature rise of the driver IC 5 is suppressed by providing power distributing circuits at both plus and minus terminals of the power source and by delaying the timing of turning ON power MOSFETs 10 and 11 from the timing of turning ON the LDMOS 7 and 8. Further, the Examiner's observations, as to the values of registers 12 and 13, is not correct, i.e., the Examiner points out on page 10, the third paragraph, "...[S]ince the resistors (12 and 13) must be particularly high in order to regulate the high voltage from the AC source (9)...." To the contrary, the resistors (12 and 13) must be low values so as to apply the high voltage at a high speed during a short switching period of each element. Therefore, in Katayama et al., there is no description that teaches or suggests that the power distributing circuit is a resistive element having an impedance whose value is not smaller than one-tenth of the value of a resistive component of a conducting impedance of a driving device.

In addition, col. 4, lines 11-13 of Katayama et al. explains "Moreover, power consumption in the output circuit 6 is suppressed at a low level, because LDMOSs are driven

with a small gate current." This means that the gate current of an output push-pull circuit, constituted by a CMOS circuit having P channel LDMOS 7 and N-channel LDMOS 8, is smaller than that of the output push-pull circuit constituted by a general totem pole circuit having an N channel MOS instead of the P-channel LDMOS 7 in the CMOS circuit. Therefore, in Katayama et al., when an impedance value of the resistive element (i.e., a power distributing circuit) is set higher than one-tenth of a conducting impedance of the driving device, the gate current of the driving device is not changed.

Claims 66 and 69

In accordance with claims 66 and 69, a power distributing circuit is a constant-current source.

On other hand, although col. 1, lines 45-47 of Katayama et al. explains that "the voltage dividing loads such as power transistors or resistors are connected between the power source and the integrated circuit.", the voltage dividing loads are not loads for controlling a current of the power source 9 at a constant value, and the current of the power source 9 is transiently changed to divide voltage drops caused by the LDMOSs 7 and 8 to the voltage dividing loads and the LDMOSs 7 and 8 by a specific ratio. Therefore, the changing current of the power source 9 flows equally through the voltage dividing loads and the LSMOSs 7 and 8, so that temperature rise (heating) is divided between the voltage dividing loads and the LDMOSs 7 and 8 in accordance with the specific rate of the voltage dividing. Consequently, Katayama et al. does not teach or suggest that the power distributing circuit is a constant current source.

Claims 67 and 70

With regard to claims 67 and 70, a driving device is a device whose input withstand voltage is higher than an output voltage.

In Katayama et al., the reason for increasing a withstand voltage of the driving device 5 is that the LDMOSs 7, 8 are (vertically) connected between power supply terminals 5B, 5C and the voltage between the power supply terminals 5B, 5C is divided by the LDMOSs 7, 8. Specifically, a withstand voltage of LDMOS 7, 8 is not increased. Therefore, Katayama et al. does not teach or suggest that the driving device is a device whose input withstand voltage is higher than an output voltage.

Claims 33, 63, and 64

As described above, amended claim 33 includes the features of previous claims 33 and 34, new claim 63 includes the features of previous claims 17, 29 and 30 and new claim 64 includes the features of previous claims 17, 29 and 31. Hence, claims 33, 63, and 64 distinguish over the Examiner's prior art rejections thereof and are submitted to be allowable.

III. CLAIMS 1, 9, 17, 26, 27, 33, 35 AND 38-40 ARE REJECTED UNDER 35 USC 102(e) AS BEING ANTICIPATED BY MIYAZAKI (6,501,467)(PAGES 7-1 OF THE ACTION)

The rejection is respectfully traversed.

In Miyazaki, a driving power supply source corresponds to "VLCD" (maximum potential), each of driving devices (amplifiers) A1 to A5 does not receive electric power from a plurality of voltages (VI1 to VI5), and none of resistors R1 to R5 distribute electric power from the driving devices A1 to A5.

Therefore, Miyazaki is basically different from and, indeed, is unrelated to, the present invention and the rejection should be withdrawn.

CONCLUSION

In accordance with the foregoing, each of the independent claims has been shown to patentably distinguish over the references of record, namely, Katayama and Miyazaki, and, accordingly, the respective dependent claims distinguish thereover, as well, by inheriting the limitations of their respective independent claims as well as for the additional, patentably distinguishing features recited therein.

There being no other objections or rejections, it is submitted that the application is in condition for allowance, which action is earnestly solicited.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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